COSMOLOGICAL ARGUMENTS FOR DUMMIES

YouTube

"DEBATING TRUTH WITH JAN"

Rational Belief in God

Cosmological Arguments for Dummies

by "Debating Truth with Jan" YouTube Channel

What is Life?

Imagine that you black out right at this moment while reading this short book...

Then you wake up...but you're on a plane.

What would be your first question?

Perhaps, what happened? Or, how did I get here?

So, you would probably go and ask a stewardess, but what would you do if she said to you, "Oh, don't worry about it. There's plenty of great food on the plane".

Confusing?

So you'd probably ask her again, "But where is this plane going? What is the final destination?".

The stewardess insists on reminding you of the benefits of flying with their airlines, which comes down to great food, magazines or free alcoholic beverages on the plane.

This is life.

You came into existence not knowing how, and for your entire life you've been just going through the motions without asking about where did you come from, what's the purpose of this life, where did the universe come from or what happens after you die.

You might argue that these are pretty basic questions, but try and ask someone about these things and you'll get a million answers but in reality no one really knows what's going on. You might even get people who become annoyed with you, just by asking them these questions - especially if you live in Europe or North America.

This short book is for those who dare to go deeper and come closer to finding the truth.

How do we get knowledge?

But hold on a second. Don't we need empirical or scientific proofs for knowing any sort of truth? Well, there are many other ways to obtain knowledge:

- 1. Science
- 2. Deductive logic
- 3. Testimony
- 4. Moral values
- 5. Intuitions/Self evident truths
- 6. Mathematics

Let's talk about <u>science</u> first. What is science? It is the application of reason to a natural world. It's a method of trying to get knowledge about the real world. But it's not the only root of knowledge and it's one of the weakest sources of truth by nature, because it's inductive. This means that it changes over time with new experiments.

<u>Scientific induction</u> is a process of reasoning, used esp in science, by which a general conclusion is drawn from a set of premises, based mainly on experience or experimental evidence. The conclusion goes beyond the information contained in the premises, and does not necessarily follow from them. For example Newton discovered gravity and his idea was that the force that makes the apple fall and that holds us on the ground is the same as the force that keeps the moon and planets in their orbits.

His law was later overthrown by Einstein when he discovered that gravity was just a natural outcome of a mass's existence in space. So science evolves with time and it can always change with new variables and tests. Both of them were however correct for their time period and considered true.

Do you have a great, great grandfather? If you answered yes, how can you be sure? Are you certain of it? Do you have any scientific evidence for this claim?

You know this because your family told you about him right? Therefore it must have happened. This is known as testimony and it's one of the sources of knowledge - for example all history depends on accurate testimony. How do we know that Caesar existed? *Through* testimony not any scientific evidence. At this moment in time you haven't verified scientifically that your great, great grandfather existed and you still believe it right?

You could also say that it's pretty obvious why he must have existed. Because you exist. So going back using logic we must come to the conclusion that your great, great grandfather must have existed for you to exist. This is called <u>deductive reasoning or logic</u> and the thing about this type of knowledge is that it's much stronger evidence than scientific knowledge because it can't change over time.

Imagine that you see a child being run over by an angry driver on the street on purpose. You'd say that's wrong right? What about when someone jumps in and saves the child from dying? That's brave and should be applauded right? Well, how can you prove that any of these things are either evil or good? In reality, we can't prove *moral values but we still believe* in them intuitively and it's pretty universal, even though they are not scientific in nature.

Almost all of human history is a battle of moral claims and arguments between civilizations. So we all act and recognize moral truths and beliefs as some form of knowledge, without having any scientific proof for them.

Another argument is that we can all agree that we exist in this world and this world is real. But there is no scientific proof for this world being real. We can easily be living in a simulation for what it's worth. Well, for science to even work, we must presuppose that this world is real and it must be accepted by everyone. This is called *self-evident truth or intuitions*.

Another root of knowledge is mathematics 1+1+1=3. Is this scientific knowledge in nature? No it isn't. It's simple *mathematics*. It doesn't change and it must be true

Existence requires explanation

We know that we exist, right? There is existence all around us. There are generally three types of existences in our world:

- 1. Possible things or contingent things. This can be anything such as your phone, yourself or even the earth. Contingent means that they could have been some other way. You could have been taller or shorter. Your phone could have had a different color.
- 2. Necessary things. These explain why any contingent existence occurs.
- 3. Impossible things. For example a squared circle or a married bachelor.

So what's the difference between a contingent thing and a necessary thing? Necessary thing is that which can not not be! It must exist for other things to exist.

For example 2+2=4

Contingent things don't have to exist for other things to exist such as your phone, chair, earth or even our galaxy. But a necessary thing must exist across all possible worlds!

Imagine now that we put all contingent things together - everything in creation - and call it a set. Now for the sake of the argument, let's even put the necessary thing inside of it, even though it's not possible. Whether the necessary thing is inside or outside of the set of contingent things, both times it still explains them.

Just to be clear, contingent things can't exist outside of set - set includes all of them. You might say that if there's only contingent things and no necessary existence, then the set itself could be a necessary existence and therefore self sufficient right? Well, that's impossible, because you can't have something that's independent and <u>composed of parts</u> at the same time.

Let's now imagine that we have a set of finite or infinite universes. In both cases, it can't depend on itself but rather on something outside of the set. Anything made up of parts is dependent or contingent. (multiverse is made of parts)

Let's quickly look into what we mean by a part or also known as mereology. Part is a piece of something, that can be broken down into more parts. These can't be attributes of a necessary existence.

Think about it like this. If the part is dependent then the set is dependent on those parts. Parts must also be differentiated (1-2-3) but if that's true then these parts could have been put together some other way! Which means they are contingent.

For example:

Set A,B,C - can be expressed as A,B,C or B,A,C or C,B,A. This contradicts the idea of necessity because necessary things can only be expressed in one way (2+2 - 4) and can't be any other way. That's why it's also not impossible to have more than one necessary thing.

Imagine we have two Gods for example, God A and God B. God A is different from God B in X. Since the X is not necessary and it can be conceived in another way, *in abstraction without* reference to anything else, means that God B is not God after all but he's contingent.

This also goes against the idea of *determinism*, which claims that we are determined because there's an uninterrupted causal chain that has determined us - you're basically a puppet, because you're analyzing yourself with connection to the causal chain. If we remove this chain and abstract our existence without reference to a causal chain, in abstraction there's no quality in me which supplies myself with continued existence. I'm destructible and generatable. I was born and I will die. Therefore, I'm contingent.

Since the <u>multiverse</u> has parts therefore it can't be necessary because it can be rearranged since it depends on its members (you can take out of it and put things in the set). This can't happen to a necessary thing (it's always like that all the time).

Same thing goes for the idea of Pantheism which claims that God is infinite in the occupying universe, which means that he's literally everywhere. But if he's part of the universe then he's made out of parts. If he's made of parts - he's contingent and not necessary.

Also it's important to understand the difference between finite and infinite sets. For example a *finite* set can be:

- 1. **Linear** which means that in a set: A, B, C: A caused B, and B caused C, therefore the primary cause is A. Pretty simple.
- 2. **Circular** which means that in a set: A, B, C: A caused B, and B caused C, but C also caused A. This is impossible because the effects would be distant causes of themselves. Something like a mother giving birth to herself.

With regards to the *infinite* set, let's assume the contingent set has infinite numbers in it. The set is made of different parts, because anything from parts is contingent.

Now let's also compare necessary facts with necessary existence.

2+2=4 is a necessary fact.

If you prove the necessary existence then anything about this necessary existence is necessary. Any way you describe the attributes of this existence must also be necessary by extension and not contingent. The key thing to remember is that if a necessary existence has a contingent attribute - then the whole necessary existence is contingent. Existence can only be one, because as we explained if we have two necessary existences and they differ in an attribute, then this attribute makes the whole necessary existence contingent.

The reality is that nothing in this universe is actually really necessary but everything is contingent and it depends on something else or is caused by something because it can't just exist on its own. For example your car or your chair, didn't need to exist for other things to exist. If every contingent portion of reality has a cause or depends on something else, then there must be some kind of non-contingent or necessary portion of reality.

Where did the universe come from?

Now let's understand that things can't come into existence out of nothing, which means that whatever begins to exist must have a cause.

Let's take a simple computer as an example. It began to exist when the parts that the computer is made out of such as the motherboard, processor, or keyboard were assembled by a machine and formed into a finished product. But these parts of the computer are also made out of something. In this case it could be metal or plastic, which is however also made of smaller forms of matter - chemical elements such as atoms or molecules.

But what are these elements made of? Perhaps quarks, or some quantum energy fields but even they must be made of something right? What caused them to exist? They couldn't just pop into existence - or could they?

Could this process go on forever? Well, if it goes on forever then the computer would never exist. Why? Because there would be no beginning...

The *infinity* or "forever" doesn't actually exist (except only in theory) because it produces contradictory results. For example, how much is infinity + 1? Infinity. What about infinity - 1? Still infinity.

If this process goes on forever in theory, then we never get down to the first thing that caused these molecules and atoms to exist. Since we know that this is impossible, because the computer does exist, we can conclude that there must have been a beginning of this matter somewhere.

Similarly, we can apply this principle to the <u>universe</u>. The universe is also made out of parts and it can't be infinite. The universe must have had a beginning otherwise we would never arrive at this very moment, which science agrees on with the big-bang theory. This was the beginning of time, space, and matter in one singularity.

The fact that we exist in this specific time and space tells us that there must have been a beginning. We're at the present moment in time right now so if an actual infinity exists and we would go back in past, then it would go on forever but, if an actual amount of events already occurred up until this point, this would mean that we traversed the actual infinite, which is impossible.

If we can never reach infinity and we're at the present moment now, we can doubt the fact that the actual infinite amount of events have occurred and if that's not possible then the universe couldn't exist forever in the past.

But we know for a fact that we exist right? Which tells us that something did pull the trigger because we wouldn't be in this very moment right now. If the universe was infinite and eternal in the past, we would never get to the present moment because we wouldn't be able to traverse the actual infinite, which we did by existing.

Some people might jump in and say that we're making huge leaps of faith because we're applying this principle to the universe, which we know very little about. Yes that's true, but this doesn't mean that applying this logical principle is incorrect. For example we know that one brick is hard. So is the wall of bricks. Both part and the whole share the same property they are hard. Of course this is not the case for everything. For example when we say that the house is very big, that doesn't mean that the part of the house, for example a window, doesn't share the same property as the whole - it can be small.

Also we need to remember that this is how science works as well, so technically we'd have to throw into the trash the whole scientific method.

In science we always have a <u>limited</u> set of observations and then we conclude for the next observation. You actually can't really see any of the scientific theories such as evolution in practice.

One thing to keep in mind as well is that the *universe is always contingent* and not necessary therefore it depends on something else to exist. Contingent parts always make up contingent wholes and the idea is not relative so it can be applied across the whole universe.

But what if **causality** doesn't exist outside of the universe?

Perhaps the universe can come from nothing and we don't need to worry about where the universe comes from.

Causality is a necessary rule of connection between preceding and succeeding events, but this question assumes that causality is derived from our experience. It's the other way around. We need causality in order to understand our experiences in the first place. It's a so-called "a priori" concept.

A priori proposition could be: "If John travels for at least four days, then he travels more than three days." This is something that one knows a priori, because it expresses a statement that one can derive by reason alone.

A posteriori proposition could be: "John lived between 1920 to 1986." If this is true, one must come to know it a posteriori, because it expresses an empirical fact unknowable by reason alone.

Now we know that the universe as well as all matter must have had a beginning for us to exist and also a cause that produced them, because things can't come into **existence from nothing**.

Or could they? This seems highly impossible because nothing doesn't produce causes. Has something ever come from nothing? Regarding a popular theory that the *quantum vacuum could produce something*, we need to understand that by nothing, we mean lack of properties. The virtual particles in this case are coming from quantum vacuum, which is not a philosophical nothing. It's a sea of fluctuating energy which produces particles. It's something coming from something else in a weird way.

So if we go against logic and claim that the universe could have come from nothing, then we have to apply the same logic to the things inside the universe. What about nothingness allows the universe to exist but not a pen or car inside the universe to pop up into existence? And if nothing could produce a universe then one would think that we would have a chaotic universe in which other things could pop out of nowhere but that actually never happens.

So maybe a **multiverse theory** is the answer = or perhaps we're in a virtual universe on a computer. This sounds really smart but actually, it doesn't really provide any explanation to our question because even the virtual world requires explanation and we can apply the same principles to it. For example who programmed the virtual world since it can't go on forever as we established. When it comes to the multiverse, since we know that the infinite number of universes is impossible, then it must mean that there might be a limited number of universes. So they also must have had a beginning then and we're right back where we started.

On top of that we've already established that the multiverse is made of parts which makes it contingent and not necessary.

So we're left with 3 options:

- a) **The Universe created itself:** This option is not valid according to our conclusion. Has anything ever created itself? Can a Mother give birth to herself?
- b) It came out of nothing: Again, impossible option because nothing doesn't produce causes.
- c) It was created: Through a process of elimination, this is the only possible alternative. The universe must have a cause because it had a beginning.

"Or were they created by nothing, or were they the creators [of themselves]? Or did they create the heavens and the earth? Rather, they are not certain."

[Quran, 52:35-36]

What do we know about the necessary being?

But what if this is just a mental idea? How can we know anything about reality right?

Well, if one argues that reality is completely unknowable and nothing you say about reality can be true, then we committed a self-defeat, because as soon as we say something about the reality we just said something about reality - even though it's about not being able to comprehend it.

If the universe was created then what things can we know about the cause or the necessary existence behind it? Where did this cause come from?

Remember that we said that everything that *begins* to exist must have a cause. If the original cause is eternal it doesn't require a cause to explain his existence, because if it did we would get into infinite regress again. The universe is finite then the cause must be infinite.

Therefore it didn't begin to exist - it was there forever. All time, space and matter came into existence at the point of the big bang – therefore the cause can't be bound by time, space or matter, but it must be outside of time, space and matter.

Let's look again at the question of **multiple causes or multiple necessary beings.** If there are multiple causes then by definition they can't be all-powerful. This means that there wouldn't be stability in this universe because of a clash of multiple wills if there were multiple independent causes. Also which cause is the necessary one? Because it can't be contingent and made out of parts that could be rearranged in some other way (which we already discussed on page 3). If we have multiple causes, they have different attributes, which would make them contingent.

Simply put, it's quite intuitive to deduce that there is *only one cause* and nothing will be necessary about this cause if we add other causes next to it.

Now the question is - can this cause be natural which means that it doesn't actually have any will, **intelligence or mind** of its own?

This cause didn't need to produce the universe, but the sheer existence of "Ourselves" is proof of the fact that this cause *decided* to "Create"! Which means that it was done through a will and not a biological or physical event.

Otherwise, how can you get a temporary effect (universe) from an eternal cause?

If the cause is natural or without intelligence, we should expect that the universe will also be eternal alongside the eternal cause, but as we know for a fact, the universe did have a beginning and it is not eternal. This means that the cause must possess a *will* because there is no good explanation of how you get temporal effect from eternal cause.

For example, we know that water boils at 100 degrees celsius. The cause in this example is 100 degrees celsius and the effect is that the water is boiling. So by necessity they go hand in hand. If you heat water to 100 degrees eternally (hypothetically) then necessarily it will boil for eternity. So, how come the universe had a beginning if the cause is eternal?

Only by attributing will to this cause can you make sense of this. Demonstrating will is pretty simple. Let's say that you sit on a chair right now and you're able to stand up. But you don't. If you decide to stand up, what does it show you? That you *have a will* which brings about the action and you can cause yourself to stand up.

We also know that the universe is 13.7 billion years old. The Big Bang cosmology tells us that the universe is highly structured, with precisely defined parameters such as age, mass, curvature, temperature, density, and rate of expansion.

Physicists calculated precise numerical values of parameters such as the mass of the proton, mass of the neutron, the speed of light or the Newtonian gravitational constant.

Looking at these parameters, some physicists asked what the universe would have been like if the values had been slightly different. They found out that if there would be even a slight change in any of the parameters the universe would not have been the sort of place in which life could emerge. This tells us that the cosmic parameters have just-right settings and are finely tuned for life to emerge

Similar calculations have been made showing that the odds of the universe having carbon-producing stars (carbon is essential to life), or of not being millions of degrees hotter than it is, or of not being shot through with deadly radiation, are likewise astronomically small.

Given this extremely improbable *fine-tuning*, we should opt-in to think that the necessary being with intelligence exists, otherwise the universe is fine-tuned by chance, which means that we must believe something incredibly improbable happened.

If there wasn't a design or fine-tuning then things would be random. I would have 7 fingers instead of 5. All you have to do is also just look at your body and organs and how everything works perfectly. You don't even notice it in your day-to-day life.

"Say, 'O Prophet,' "He is Allah—One;
Allah, the Eternal Refuge.

He neither begets nor is born,

Nor is there any equivalent to Him."

[Quran, 112:1-4]

Is there any truth in religion?

So I guess we can conclude that it's far more likely to believe with conviction that there is only **one supreme being with intelligence** that created this universe and everything in it, instead of opting out for atheism (disbelief in God) or agnosticism, which claims that we can never know the answer to these deep questions about life.

Maybe you're wondering about what to do next. If there is a God, did he communicate with human beings? What is the purpose of life? And what happens after we die?

You're probably going to dive deeper into studying different world religions, which I'd highly recommend, but you might quickly get discouraged and get stuck in this phase of *belief in God but not in any organized religion*, because of previous experiences or simply because most religions have major flaws in their theology, which are hard to overlook.

If you're looking for the most comprehensive religion that is not man-made, and that doesn't go against science, let me save you some time.

I recommend you to study Islam. Why Islam?

Islam is the only religion in the world, which has a deity, who matches the description of the necessary being that is described above without any contradictions - Allah. ("God" in Arabic)

The Islamic faith is based on reason, logic and evidence for its claims. The Quran affirms some of our scientific understanding of the universe today. This verse mentions the singularity and a big bang theory:

"The heavens and the earth were joined together as one unit, before We clove them asunder" [Quran, 21:30]

And this one talks about the expansion of the universe:

"The heavens, We have built them with power. And verily, We are expanding it" (51:47).

Islam means "Submission to the will of God", and it's not a new religion but rather the original faith of Adam, Abraham, Noah, Moses or Jesus and every other messenger which claimed that there's only one God.

Muslim is a person that has submitted his/her will to God. In this context we can say that Jesus was a Muslim for example.

Islam also explains Christianity, Judaism, and other religions and it provides a solid context for understanding the world and our life in it. It's also the only religion which makes more sense than atheism.

The Quran is a final revelation with the final messenger being Mohammed PBUH and the special thing about the Quran is that it's a direct revelation from Allah to all of humanity.

There are carbon-dated versions of the Quran which go back to the life of the prophet Muhammed PBUH. Also the book is memorized by millions of Muslims around the world, which makes it pretty difficult to change.

More importantly Islam is not just another religion, but a comprehensive system which covers the areas of finance and banking, military law, family dynamics, judicirary and political system as well as the food preparation, or personal hygiene. It makes sense that there wouldn't be anything left to chance, if it comes from the creator of the universe.

Most importantly, Islam provides a clear purpose for a Muslim in this life, which is to build a relationship with Allah before they die by performing good deeds and acts of worship (prayer, charity, fasting etc.) to pass Allah's test (this life) and hope for his mercy on a Day of Judgement, where each and every one of us will be held accountable for everything we did in this life.

A Muslim's goal is to avoid the hellfire and receive a final reward - eternal paradise, which no eye has ever seen and no ear has ever heard of.